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NEWS 6 JAN 22 CA/CAPLUS updated with revised CAS roles  
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NEWS 8 JAN 29 PHAR reloaded with new search and display fields  
NEWS 9 JAN 29 CAS Registry Number crossover limit increased to 300,000 in  
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NEWS 10 FEB 15 PATDPASPC enhanced with Drug Approval numbers  
NEWS 11 FEB 15 RUSSIAPAT enhanced with pre-1994 records  
NEWS 12 FEB 23 KOREAPAT enhanced with IPC 8 features and functionality  
NEWS 13 FEB 26 MEDLINE reloaded with enhancements  
NEWS 14 FEB 26 EMBASE enhanced with Clinical Trial Number field  
NEWS 15 FEB 26 TOXCENTER enhanced with reloaded MEDLINE  
NEWS 16 FEB 26 IFICDB/IFIPAT/IFIUDB reloaded with enhancements  
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000  
to 300,000 in multiple databases  
NEWS 18 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format  
NEWS 19 MAR 16 CASREACT coverage extended  
NEWS 20 MAR 20 MARPAT now updated daily  
NEWS 21 MAR 22 LWPI reloaded  
NEWS 22 MAR 30 RDISCLOSURE reloaded with enhancements  
NEWS 23 APR 02 JICST-EPLUS removed from database clusters and STN  
NEWS 24 APR 30 GENBANK reloaded and enhanced with Genome Project ID field  
NEWS 25 APR 30 CHEMCATS enhanced with 1.2 million new records  
NEWS 26 APR 30 CA/CAPLUS enhanced with 1870-1889 U.S. patent records  
NEWS 27 APR 30 INPADOC replaced by INPADOCDB on STN  
NEWS 28 MAY 01 New CAS web site launched  
NEWS 29 MAY 08 CA/CAPLUS Indian patent publication number format defined  
NEWS 30 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display  
fields  
NEWS 31 MAY 21 BIOSIS reloaded and enhanced with archival data  
NEWS 32 MAY 21 TOXCENTER enhanced with BIOSIS reload  
NEWS 33 MAY 21 CA/CAPLUS enhanced with additional kind codes for German  
patents  
NEWS 34 MAY 22 CA/CAPLUS enhanced with IPC reclassification in Japanese  
patents

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MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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=> file medline, caplus, embase, biotechds, scisearch, biosis			
COST IN U.S. DOLLARS	SINCE FILE	TOTAL	
	ENTRY	SESSION	
FULL ESTIMATED COST	1.26	1.26	

FILES 'MEDLINE, CAPLUS, EMBASE, BIOTECHDS, SCISEARCH, BIOSIS'  
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ENTER A FILE NAME OR (IGNORE):end

=> s rhoBC operon  
L1 0 RHOBC OPERON

=> s rhoBC  
L2 2 RHOBC

=> s rhoB and rhoC  
L3 305 RHOB AND RHOC

=> s l3 and intergenic  
L4 0 L3 AND INTERGENIC

=> s l3 and intergenic  
L5 0 L3 AND INTERGENIC

=> s l3 and noncoding  
L6 0 L3 AND NONCODING

=> s l3 and PCVR  
L7 0 L3 AND PCVR

=> s l3 and PCR  
L8 20 L3 AND PCR

=> dup rem l8  
PROCESSING COMPLETED FOR L8  
L9 11 DUP REM L8 (9 DUPLICATES REMOVED)

=> d ibib abs l9 1-11

L9 ANSWER 1 OF 11 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2004085934 MEDLINE <<LOGINID::20070604>>  
DOCUMENT NUMBER: PubMed ID: 14975755  
TITLE: Expression of seven main Rho family members in gastric carcinoma.  
AUTHOR: Pan Yanglin; Bi Feng; Liu Na; Xue Yan; Yao Xuebiao; Zheng Yi; Fan Daiming  
CORPORATE SOURCE: Institute of Digestive Disease, Xi'jing Hospital, The Fourth Military Medical University, Xi'an, Shaanxi 710032, PR China.  
SOURCE: Biochemical and biophysical research communications, (2004 Mar 12) Vol. 315, No. 3, pp. 686-91.  
Journal code: 0372516. ISSN: 0006-291X.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: (COMPARATIVE STUDY)  
Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200403  
ENTRY DATE: Entered STN: 21 Feb 2004  
Last Updated on STN: 31 Mar 2004  
Entered Medline: 30 Mar 2004

AB Rho GTPases were previously shown to have an important role in cancer development and progression, including cell transformation, proliferation, invasion, metastasis, and angiogenesis. However, there is still little information available on the clinical significance of Rho GTPases expression in human cancer specimens. In the present study, we systemically investigated the mRNA expression levels of seven main members RhoA, \*\*\*RhoB\*\*\*, \*\*\*RhoC\*\*\*, Rac1, Rac2, Rac3, and Cdc42 of Rho family using semi-quantitative reverse transcription- \*\*\*PCR\*\*\* in 53 patients with gastric carcinoma and 7 gastric cancer cell lines. The total and activities of RhoA, Rac1 and Cdc42 in 5 gastric cancer cell lines were also examined. The mean mRNA expression levels of RhoA and Rac1 in gastric cancer tissue specimens were significantly higher than those in the adjacent non-tumorous tissue specimens ( $p < 0.01$ ). The higher expression of RhoA was significantly correlated with higher TNM stage ( $p < 0.05$ ) as well as with poorly differentiated histological type ( $p < 0.05$ ) of gastric carcinoma. The increased expression of Rac1 was related to higher TNM stages of gastric carcinoma ( $p < 0.05$ ). The expression levels of mRNA, total protein and activities of RhoA and Rac1 in 7 gastric cancer cell lines were all higher than that in gastric mucosal epithelial cell line GES-1. These findings indicate that RhoA and Rac1 may play important roles in the carcinogenesis and progression of gastric carcinoma.

L9 ANSWER 2 OF 11 EMBASE COPYRIGHT (c) 2007 Elsevier B.V. All rights reserved on STN  
ACCESSION NUMBER: 2004011846 EMBASE <<LOGINID::20070604>>  
TITLE: Prognostic Value of Rho GTPases and Rho Guanine Nucleotide Dissociation Inhibitors in Human Breast Cancers.  
AUTHOR: Jiang W.G.; Watkins G.; Lane J.; Cunnick G.H.; Douglas-Jones A.; Mokbel K.; Mansel R.E.  
CORPORATE SOURCE: W.G. Jiang, Metastasis Research Group, University Department of Surgery, Univ. of Wales College of Medicine, Heath Park, Cardiff CF4 4XN, United Kingdom.  
jiangw@cf.ac.uk  
SOURCE: Clinical Cancer Research, (15 Dec 2003) Vol. 9, No. 17, pp. 6432-6440.

Refs: 39

ISSN: 1078-0432 CODEN: CCREF4

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 016 Cancer

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20 Feb 2004

Last Updated on STN: 20 Feb 2004

**AB Purpose:** Rho family members are small GTPases that are known to regulate malignant transformation and motility of cancer cells. The activities of Rhos are regulated by molecules such as guanine nucleotide dissociation inhibitors (GDIs). This study determined the levels of expression and the distribution of Rho-A, -B, -C, and -G, and Rho-6, -7, and -8, as well as Rho-GDI-.beta., and Rho-GDI-.gamma. in breast cancer and assessed their prognostic value. **Experimental Design:** The distribution and location of Rhos and RhoGDIs were assessed using immunohistochemical staining of frozen sections. The levels of transcripts of these molecules were determined using a real-time quantitative \*\*\*PCR\*\*\*. Levels of expression were analyzed against nodal involvement and distant metastasis, grade, and survival over a 6-year follow-up period. **Results:** The levels of Rho-C, Rho-6, and Rho-G were significantly higher in breast cancer tissues (n = 120) than in background normal tissues (n = 32). However, the level of Rho-A and -B and rho-7 and -8 was found to be similar in tumor and normal tissues. Immunohistochemical staining revealed the high level of staining of Rho-C protein in tumor cells. The levels of Rho-GDI-.gamma. transcripts were found to be significantly lower in tumor tissues than in normal tissues (P < 0.05 and P < 0.001, respectively). Node-positive tumors have significantly higher levels of Rho-C and Rho-G, and lower levels of Rho-GDI and Rho-GDI-.gamma. transcripts, than do node-negative tumors. Significantly higher levels of Rho-C and Rho-G were seen in patients who died of breast cancer than in those who remained disease free. Patients with recurrent disease, with metastasis or who died of breast cancer, also exhibited higher levels of Rho-6 but lower levels of Rho-GDI-.gamma.. Higher-grade tumors were also associated with low levels of Rho-GDI and Rho-GDI-.gamma.. **Conclusions:** Raised levels of Rho-C, Rho-G and Rho-6 and reduced expression of Rho-GDI and -GDI-.gamma. in breast tumor tissues are correlated with the nodal involvement and metastasis. This suggests that the expression of Rhos and RhoGDIs in breast cancer is unbalanced and that this disturbance has clinical significance in breast cancer.

L9 ANSWER 3 OF 11 MEDLINE on STN

ACCESSION NUMBER: 2003292780 MEDLINE <<LOGINID::20070604>>

DOCUMENT NUMBER: PubMed ID: 12697836

TITLE: HIF-1alpha mRNA and protein upregulation involves Rho GTPase expression during hypoxia in renal cell carcinoma.

AUTHOR: Turcotte Sandra; Desrosiers Richard R; Beliveau Richard

CORPORATE SOURCE: Laboratoire de medecine moleculaire, Hopital Sainte-Justine, Universite du Quebec a Montreal, CP 8888, Succursale centre-ville, Montreal, Quebec, Canada H3C 3P8.

SOURCE: Journal of cell science, (2003 Jun 1) Vol. 116, No. Pt 11, pp. 2247-60. Electronic Publication: 2003-04-15. Journal code: 0052457. ISSN: 0021-9533.

PUB. COUNTRY: England: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 200401

ENTRY DATE: Entered STN: 25 Jun 2003

Last Updated on STN: 22 Jan 2004

Entered Medline: 21 Jan 2004

AB The small G proteins of the Rho family are involved in reorganization of the actin cytoskeleton, cell migration and in the regulation of gene transcription. Hypoxia-induced ATP depletion results in the disruption of actin organization which could affect Rho functions. In solid tumors, regions with low oxygen tension stimulate angiogenesis in order to increase oxygen and nutrient supply. This process is mediated by stabilization of the transcriptional factor hypoxia inducible factor 1 (HIF-1), which increases vascular endothelial growth factor (VEGF) production. In this study, we investigated the activities of Rho proteins, which are key regulators of cytoskeleton organization during hypoxia in renal cell carcinoma. Caki-1 cells were exposed to hypoxia (1% O<sub>2</sub>) and exhibited increased Cdc42, Rac1 and RhoA protein expression. Immunoprecipitation of metabolically labelled RhoA showed that overexpression was at least due to neo-synthesis. The Rho GTPases overexpressed during hypoxia were mainly located at membranes and pull-down assays demonstrated that they were active since they bound GTP. RT- \*\*\*PCR\*\*\* analysis indicated that the increase in RhoA protein expression was also reflected at the mRNA level. Overexpression and activation of Rho proteins were downstream of, and dependent on, the production of reactive oxygen species (ROS) since, in the presence of an inhibitor, both the rise of ROS and upregulation of Rho proteins were abolished. Importantly, preincubation of cells with the toxin C3, which inhibits RhoA, reduced HIF-1alpha protein accumulation by 84% during hypoxia. Together, these results support a model where ROS upregulate Rho protein expression and where active RhoA is required for HIF-1alpha accumulation during hypoxia.

L9 ANSWER 4 OF 11 MEDLINE on STN DUPLICATE 2  
ACCESSION NUMBER: 2003281198 MEDLINE <<LOGINID::20070604>>  
DOCUMENT NUMBER: PubMed ID: 12808121  
TITLE: Up-regulation of small GTPases, RhoA and \*\*\*RhoC\*\*\*, is associated with tumor progression in ovarian carcinoma.  
AUTHOR: Horiuchi Akiko; Imai Tsutomu; Wang Cuiju; Ohira Satoshi; Feng Yuzhen; Nikaido Toshio; Konishi Ikuo  
CORPORATE SOURCE: Department of Obstetrics and Gynecology, Shinshu University School of Medicine, Matsumoto, Japan.. aki9hori@hsp.md.shinshu-u.ac.jp  
SOURCE: Laboratory investigation; a journal of technical methods and pathology, (2003 Jun) Vol. 83, No. 6, pp. 861-70. Journal code: 0376617. ISSN: 0023-6837.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200307  
ENTRY DATE: Entered STN: 17 Jun 2003  
Last Updated on STN: 13 Jul 2003  
Entered Medline: 11 Jul 2003

AB To clarify the role of small GTPases Rho in the biologic behavior of ovarian carcinoma, we first examined the mRNA expression of RhoA, \*\*\*RhoB\*\*\*, and \*\*\*RhoC\*\*\* in benign, borderline, and malignant ovarian tumors using RT- \*\*\*PCR\*\*\* and real-time RT- \*\*\*PCR\*\*\*. The expression and localization of RhoA protein were also analyzed by Western blotting and immunohistochemistry. Finally, we examined whether up-regulation of Rho enhances the invasiveness of ovarian cancer cells in vitro. Analysis of mRNA levels of the Rho family genes revealed that levels of both RhoA and \*\*\*RhoC\*\*\* were significantly higher in carcinomas than in benign tumors (RhoA,  $p = 0.0035$ ; \*\*\*RhoC\*\*\*,  $p = 0.0006$ ). According to histologic subtype, both RhoA and \*\*\*RhoC\*\*\* mRNA levels in serous carcinomas were significantly higher than those in

other histologic types. With regard to the International Federation of Gynecological and Obstetrics stage classification, both of RhoA and \*\*\*RhoC\*\*\* mRNA levels were significantly higher in tumors of Stages III+IV than in those of Stages I+II (RhoA,  $p = 0.0200$ ; \*\*\*RhoC\*\*\*,  $p = 0.0057$ ). In addition, analysis of matched pairs of primary and disseminated lesions demonstrated that expression of both RhoA and \*\*\*RhoC\*\*\* mRNA was significantly higher in metastatic than in primary tumors. Examination of the protein level showed that expression of RhoA was also increased in advanced ovarian carcinomas, especially those of serous histology. Accordingly, we hypothesized that up-regulation of Rho GTPases plays an important role in the progression of ovarian carcinoma. Matrigel invasion assay using the ovarian cancer cell line, SKOV3, showed that up-regulation and activation after treatment with lysophosphatidic acid was associated with enhanced invasion of the cancer cells. This increase in invasiveness was suppressed by the addition of C3, a specific inhibitor of Rho. These findings suggest that up-regulation of Rho GTPases is important in the tumor progression of ovarian carcinoma and that Rho family proteins could be a molecular target in cancer therapy.

L9 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:168776 CAPLUS <<LOGINID::20070604>>  
 DOCUMENT NUMBER: 141:258275  
 TITLE: Expression of Rho family in gastric cancer cell lines  
 and its significance  
 AUTHOR(S): Pan, Yanglin; Bi, Feng; Liu, Na; Zhang, Yumei; Xue,  
 Yan; Song, Baohua; Fan, Daiming  
 CORPORATE SOURCE: Xijing Hospital, Fourth Military Medical University,  
 Xi'an, 710032, Peop. Rep. China  
 SOURCE: Jiefangjun Yixue Zazhi (2003), 28(6), 517-519  
 CODEN: CFCHBN; ISSN: 0577-7402  
 PUBLISHER: Jenminjun Chubanshe  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese

AB The expression and significance of of five important members of Rho family were studied in the pathogenesis of gastric and gastrointestinal cancers. The mRNA and protein expression levels of RhoA, \*\*\*RhoB\*\*\*, \*\*\*RhoC\*\*\*, Rac1 and Cdc42 in several gastric cancer cell lines were examd. by semi-quant. RT-\*\*\*PCR\*\*\* and western blotting, resp. Compared with normal control of gastric mucosa and intestinal epithelial cell line, the mRNA and protein expression levels of RhoA, Rac1 and Cdc42 were up-regulated in five gastric cancer cell lines. \*\*\*RhoB\*\*\* protein could not be detected in all cell lines and could be induced by insulin in intestinal epithelial cell line, confirming that \*\*\*RhoB\*\*\* was an immediately induced protein. The increased mRNA and protein expression levels of RhoA, Rac1 and Cdc42 in gastric cancer cell lines indicated that Rho GTPases might play an important role in the carcinogenesis of gastric mucosa.

L9 ANSWER 6 OF 11 SCISEARCH COPYRIGHT (c) 2007 The Thomson Corporation on STN  
 ACCESSION NUMBER: 2001:174909 SCISEARCH <<LOGINID::20070604>>  
 THE GENUINE ARTICLE: 402ET  
 TITLE: Overexpression of RhoA mRNA is associated with advanced  
 stage in testicular germ cell tumour  
 AUTHOR: Kamai T (Reprint); Arai K; Tsujii T; Honda M; Yoshida K  
 CORPORATE SOURCE: Dokkyo Univ, Sch Med, Dept Urol, 880 Kitakobayashi, Mibu,  
 Tochigi 3210293, Japan (Reprint); Dokkyo Univ, Sch Med,  
 Dept Urol, Mibu, Tochigi 3210293, Japan  
 COUNTRY OF AUTHOR: Japan  
 SOURCE: BJU INTERNATIONAL, (FEB 2001) Vol. 87, No. 3, pp. 227-231.  
 ISSN: 1464-4096.  
 PUBLISHER: BLACKWELL SCIENCE LTD, P O BOX 88, OSNEY MEAD, OXFORD OX2

ONE, OXON, ENGLAND.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 25

ENTRY DATE: Entered STN: 9 Mar 2001

Last Updated on STN: 9 Mar 2001

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

AB Objective To clarify the role of Rho small GTP-binding protein (Rho) in the progression of testicular germ cell tumour (GCT), by examining the expression levels of mRNAs of Rho genes in testicular GCT.

Patients and methods The mRNA levels of the RhoA, \*\*\*RhoB\*\*\* and \*\*\*RhoC\*\*\* genes were analysed in the surgical specimens of testicular GCT tissues from 45 consecutive Japanese patients, and in the corresponding unaffected tissue originating from the same patient, using reverse transcription-polymerase chain reaction. The expression levels in tumour tissues were compared with those in unaffected tissues and the relationship between their expression levels in tumours and tumour stage evaluated. The expression levels of mRNAs of the Rho genes were also evaluated between tumours with seminoma only, and mixed tumours with seminoma and nonseminoma.

Results The mRNA levels of RhoA were greater in tumour tissues than in unaffected tissues of the resected testis ( $P < 0.01$ ); the mRNAs of \*\*\*RhoB\*\*\* and \*\*\*RhoC\*\*\* were not detected in either tissue. The increase in RhoA mRNA levels was related to tumour stage ( $P < 0.05$ ). The mRNA levels of RhoA in seminomatous and nonseminomatous areas where both were present were higher than those in tumours with seminoma only ( $P < 0.05$ ).

Conclusions These results suggest that RhoA is involved in testicular germinal epithelial carcinogenesis and progression in testicular GCT, indicating that RhoA may be a useful prognostic marker for progression in testicular GCT.

L9 ANSWER 7 OF 11 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2000:445190 BIOSIS <<LOGINID::20070604>>

DOCUMENT NUMBER: PREV200000445190

TITLE: Recognition of RhoA by Clostridium botulinum C3 exoenzyme.

AUTHOR(S): Wilde, Christian; Genth, Harald; Aktories, Klaus; Just, Ingo [Reprint author]

CORPORATE SOURCE: Institut fuer Pharmakologie und Toxikologie der Universitaet Freiburg, Hermann-Herder-Strasse 5, D-79104, Freiburg, Germany

SOURCE: Journal of Biological Chemistry, (June 2, 2000) Vol. 275, No. 22, pp. 16478-16483. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 18 Oct 2000

Last Updated on STN: 10 Jan 2002

AB The C3-like ADP-ribosyltransferases exhibit a very confined substrate specificity compared with other Rho-modifying bacterial toxins; they selectively modify the RhoA, -B, and -C isoforms but not other members of the Rho or Ras subfamilies. In this study, the amino acid residues involved in the RhoA substrate recognition by C3 from Clostridium botulinum are identified by applying mutational analyses of the nonsubstrate Rac. First, the minimum domain responsible for the recognition by C3 was identified as the N-terminal 90 residues. Second, the combination of the N-terminal basic amino acids (RhoArg5-Lys6), the acid residues RhoGlu47 and RhoGlu54 only slightly increases ADP-ribosylation but fully restores the binding of the respective mutant Rac to C3. Third, the residues RhoGlu40 and RhoVal43 also participate in binding to C3 but they are mainly involved in the correct formation of the ternary complex between Rho, C3, and NAD<sup>+</sup>. Thus, these six residues

(Arg5, Lys6, Glu40, Val43, Glu47, and Glu54) distributed over the N-terminal part of Rho are involved in the correct binding of Rho to C3. Mutant Rac harboring these residues shows a kinetic property with regard to ADP-ribosylation, which is identical with that of RhoA. Differences in the conformation of Rho given by the nucleotide occupancy have only minor effects on ADP-ribosylation.

L9 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:736914 CAPLUS <<LOGINID::20070604>>

DOCUMENT NUMBER: 131:347552

TITLE: Protein and DNA sequences encoding a novel human Rho GTPase, designated RHOH, and uses thereof in cancer diagnosis

INVENTOR(S): Allen, Maxine J.; Vega, Raquel; Rutter, Marc; Abel, Ken

PATENT ASSIGNEE(S): Axys Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9958669	A1	19991118	WO 1999-US10061	19990506
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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9939757	A	19991129	AU 1999-39757	19990506
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PRIORITY APPLN. INFO.: US 1998-84938P P 19980511

WO 1999-US10061 W 19990506

AB This invention provides the protein sequence of a newly identified human GTP-binding protein, designated RHOH, which is believed to be a member of the Rho GTPase family. In addn., the sequence and location (chromosome 14) of the rhoh gene are provided. The amino acid sequence of RHOH is consistent with the primary structure of a GTP-binding protein, such as those within the Rho GTPase subfamily, and shows the greatest (80% identity) homol. with human Rho protein TC10. In one embodiment, the invention relates to diagnostic assays for detecting polymorphisms in the rhoh gene, which may be assocd. with certain types of cancer.

REFERENCE COUNT: 9 . THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:36463 CAPLUS <<LOGINID::20070604>>

DOCUMENT NUMBER: 130:220576

TITLE: A role for \*\*\*rhoB\*\*\* in the delamination of neural crest cells from the dorsal neural tube

AUTHOR(S): Liu, Jeh-Ping; Jessell, Thomas M.

CORPORATE SOURCE: Howard Hughes Medical Institute, Department of Biochemistry and Molecular Biophysics, Columbia University, New York, NY, 10032, USA

SOURCE: Development (Cambridge, United Kingdom) (1998), 125(24), 5055-5067

CODEN: DEVPED; ISSN: 0950-1991



PUBLISHER: Company of Biologists Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The differentiation of neural crest cells from progenitors located in the dorsal neural tube appears to involve 3 sequential steps: the specification of premigratory neural crest cell fate, the delamination of these cells from the neural epithelium and the migration of neural crest cells in the periphery. BMP signaling has been implicated in the specification of neural crest cell fate but the mechanisms that control the emergence of neural crest cells from the neural tube remain poorly understood. To identify mols. that might function at early steps of neural crest differentiation, we performed a \*\*\*PCR\*\*\* -based screen for genes induced by BMPs in chick neural plate cells. We describe the cloning and characterization of 1 gene obtained from this screen, \*\*\*rhoB\*\*\*, a member of the rho family GTP-binding proteins. \*\*\*RhoB\*\*\* is expressed in the dorsal neural tube and its expression persists transiently in migrating neural crest cells. BMPs induce the neural expression of \*\*\*rhoB\*\*\* but not the more widely expressed rho family member, rhoA. Inhibition of rho activity by C3 exotoxin prevents the delamination of neural crest cells from neural tube explants but has little effect on the initial specification of premigratory neural crest cell fate or on the later migration of neural crest cells. These results suggest that \*\*\*rhoB\*\*\* has a role in the delamination of neural crest cells from the dorsal neural tube.

REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 11 MEDLINE on STN DUPLICATE 3

ACCESSION NUMBER: 1998119248 MEDLINE <<LOGINID::20070604>>

DOCUMENT NUMBER: PubMed ID: 9459160

TITLE: Overexpression of the \*\*\*rhoC\*\*\* gene correlates with progression of ductal adenocarcinoma of the pancreas.

AUTHOR: Suwa H; Ohshio G; Imamura T; Watanabe G; Arii S; Imamura M; Narumiya S; Hiai H; Fukumoto M

CORPORATE SOURCE: Department of Pathology, Graduate School of Medicine, Kyoto University, Japan.

SOURCE: British journal of cancer, (1998) Vol. 77, No. 1, pp. 147-52.

Journal code: 0370635. ISSN: 0007-0920.

PUB. COUNTRY: SCOTLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199802

ENTRY DATE: Entered STN: 26 Feb 1998

Last Updated on STN: 3 Mar 2000

Entered Medline: 19 Feb 1998

AB It has been reported that the rho genes, which consist of a ras-related small GTPase protein family, regulate cytoskeletal structures and have the potential to transform cultured cells. To investigate the biological relevance of the rho genes in pancreatic carcinogenesis, we examined expressions of the rhoA, B and C genes by polymerase chain reaction after reverse transcription (RT- \*\*\*PCR\*\*\* ) in 33 cases of ductal adenocarcinoma of the pancreas. In addition, mutations of the K-ras, rhoA, B and C genes were studied in the same series of tumour tissues to correlate with rho gene expressions. The expression levels of the \*\*\*rhoC\*\*\* gene were significantly higher in tumours than in non-malignant portions ( $P < 0.001$ ). Metastatic lesions overexpressed the \*\*\*rhoC\*\*\* gene compared with primary tumours ( $P < 0.05$ ). Carcinoma tissues with perineural invasion and lymph node metastasis exhibited significantly higher expressions of the \*\*\*rhoC\*\*\* gene than tumours

without these manifestations ( $P < 0.001$  and  $P < 0.05$  respectively). Overexpression of the \*\*\*rhoC\*\*\* gene significantly correlated with poorer prognosis of patients with pancreatic adenocarcinoma ( $P < 0.05$ ). In contrast, the expression levels of the rhoA and B genes showed no significant relationship with clinicopathological findings. Mutation was not found either in the rhoA, B or C gene sequences examined. K-ras gene mutation, detected in 27 out of 33 (81.8%) cases, did not affect the expression levels in any of the rho genes. These suggest that elevated expression of the \*\*\*rhoC\*\*\* gene may be involved in the progression of pancreatic carcinoma independent of K-ras gene activation.

L9 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1994:647761 CAPLUS <<LOGINID::20070604>>  
DOCUMENT NUMBER: 121:247761  
TITLE: Sequence of rho small GTP-binding protein cDNAs from  
human retina and identification of novel 5' end.  
cloning artifacts  
AUTHOR(S): Fagan, Kevin P.; Oliveira, Luanne; Pittler, Steven J.  
CORPORATE SOURCE: College Medicine, University South Alabama, Mobile,  
AL, 36688-0002, USA  
SOURCE: Experimental Eye Research (1994), 59(2), 235-7  
CODEN: EXERA6; ISSN: 0014-4835  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB An adult human retinal cDNA library was screened with a \*\*\*PCR\*\*\* probe corresponding to the first 232 N-terminal nucleotides of the human GTP-binding rhoA gene. Equal nos. of rhoA and \*\*\*rhoC\*\*\* cDNA clones were identified, whereas no \*\*\*rhoB\*\*\* clones were obsd. Untranslated sequences within rhoA and \*\*\*rhoC\*\*\* were identified and sequenced. These sequences will be useful for the prepn. of sequence-specific probes for the anal. of rho in human tissues. The same human retinal cDNA library was analyzed for the presence of cDNA clones contg. 5' terminal artifacts.

=> d his

(FILE 'HOME' ENTERED AT 11:16:30 ON 04 JUN 2007)

FILE 'MEDLINE, CAPLUS, EMBASE, BIOTECHDS, SCISEARCH, BIOSIS' ENTERED AT 11:20:02 ON 04 JUN 2007

L1 0 S RHOB OPERON  
L2 2 S RHOB  
L3 305 S RHOB AND RHOC  
L4 0 S L3 AND INTERGENIC  
L5 0 S L3 AND INTERGENIC  
L6 0 S L3 AND NONCODING  
L7 0 S L3 AND PCVR  
L8 20 S L3 AND PCR  
L9 11 DUP REM L8 (9 DUPLICATES REMOVED)

=> d ibib abs l2 1-2

L2 ANSWER 1 OF 2 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN  
ACCESSION NUMBER: 2006:145538 BIOSIS <<LOGINID::20070604>>  
DOCUMENT NUMBER: PREV200600138422  
TITLE: Infection of wampee and lemon by the Citrus Huanglongbing  
pathogen (Candidatus Liberibacter asiaticus) in China.  
AUTHOR(S): Ding, F.; Wang, G. [Reprint Author]; Yi, G.; Zhong, Y.;  
Zeng, J.; Zhou, B.  
CORPORATE SOURCE: Huazhong Agr Univ, Plant Sci and Technol Acad, Wuhan  
430070, Hubei, Peoples R China

Gpwang@mail.hzau.edu.cn

SOURCE: Journal of Plant Pathology, (NOV 2005) Vol. 87, No. 3, pp. 207-212.

ISSN: 1125-4653.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 22 Feb 2006

Last Updated on STN: 22 Feb 2006

AB Single-step and nested polymerase chain reactions (PCR) were used to determine the presence of *Candidatus Liberibacter asiaticus*, the phloem-limited bacterial pathogen of Huanglongbing (HLB), in leaves of wampee [*Clausena lansium* (Lour.) Skeels], lemon [*Citrus limon* (L.) Burm.] and several other citrus species. Specific PCR products were obtained when single-step PCR and nested PCR were used to analyze wampee and lemon samples with or without visible HLB symptoms. Nested-PCR was found to be more accurate than single-step PCR with a sensitivity of about 104 times higher. The amount of bacterial DNA was positively correlated with HLB symptoms in the leaves. Amplicons from single-step PCR and those from nested PCR showed 100% and 99% identity, respectively, with sequences of the *rplKAJL-rpoBC* gene cluster of *Ca. Liberibacter asiaticus*. This pathogen is therefore able to infect wampee and lemon, in the leaves of which it can be readily detected by PCR. This is the first report of infections by *Ca. L. asiaticus* in wampee.

L2 ANSWER 2 OF 2 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2004:357008 BIOSIS <<LOGINID::20070604>>

DOCUMENT NUMBER: PREV200400355301

TITLE: Adsorptive and absorptive contributions to the gas-particle partitioning of polycyclic aromatic hydrocarbons: State of knowledge and recommended parametrization for modeling.

AUTHOR(S): Lohmann, Rainer [Reprint Author]; Lammel, Gerhard

CORPORATE SOURCE: Res Ctr Ocean Margins, Univ Bremen, POB 330440, D-28334, Bremen, Germany  
lohmann@alum.mit.edu

SOURCE: Environmental Science & Technology, (July 15 2004) Vol. 38, No. 14, pp. 3793-3803. print.  
ISSN: 0013-936X (ISSN print).

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Sep 2004

Last Updated on STN: 5 Sep 2004

AB Four contrasting descriptions of the gas-particle partitioning of SOC<sub>s</sub> are currently used: the Junge-Pankow adsorption model, the empirical Finizio organic matter (OM) absorption relationship, the Harner-Bidleman OM absorption model, and a dual black carbon (BC) adsorption and OM absorption model. Use of these four descriptions in a box model resulted in very different global fates, particularly for PAHs such as chrysene and benzo(a)pyrene. By reviewing published gas-particle distributions of PAHs, we found evidence for both absorptive and adsorptive contributions. Based on results from laboratory and controlled field studies we suggest that on average, octanol-air partitioning (*K*<sub>oa</sub>) is a good approximation for the OM absorption of PAHs. However, higher concentrations in particles than could be explained by OM absorption were found in selected gas-particle partitioning field studies, which were corrected for gaseous adsorption to the filter. We argue that adsorption onto BC is responsible for most of the additional sorption. Apparent adsorption coefficients to BC, *K*<sub>BC-air</sub>, were derived from field studies and showed good agreement with those predicted by adsorption onto diesel soot. For atmospheric long-range transport models we suggest the use of a dual OM absorption and BC adsorption model, with BC properties being approximated by diesel soot:  $K_p = 10^{-12} (f_{om} / \rho_{soot} K_{oa} + f_{BC} / \rho_{soot} K_{soot-air}^{atm-BC/asoot})$ . We hypothesize that kinetic constraints related to

shell-like particle structures might lead to deviations from sorption equilibrium and higher particle-borne fractions of PAHs in particular at remote sites.

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